

06-4-3  
Richard Aschieris

## PORT OF STOCKTON

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April 18, 2006

Catherine Witherspoon  
Executive Officer  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

**Re: Comments on California Air Resources Board  
"Draft Emissions Reduction Plan for Ports and  
International Goods Movement in California"**

Dear Ms. Witherspoon:

The Port of Stockton (Port) appreciates the opportunity to submit comments on the California Air Resources Board (CARB) "Draft Emissions Reduction Plan for Ports and International Goods Movement in California (DERP)" (March 21, 2006). The Port would first like to recognize and commend the efforts of CARB staff in preparing a draft plan for an emissions segment that is both geographically broad and technically complex. The Port recognizes the significant progress that was made in the March 21, 2006 DERP compared to earlier versions of the Plan. The CARB staff have attempted to characterize and quantify the wide range of emissions and the many differences in California Ports and goods movement and develop control strategies that will benefit California. This is not an easy task and we understand the difficulty in developing a rule for such a broad source category. We believe that the draft report clearly shows that not all California Ports are the same and consequently not all control mechanisms and strategies can be applied universally or equally to all Ports, all regions, or all goods movement modes. However, we must work cooperatively to find solutions to the air quality issues facing California. The Port of Stockton is committed to reducing emissions and making environmentally conscious decisions. With that in mind, we would like to submit comments on the DERP for consideration in the Rule making process.

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### Statewide Goal for 2010

The proposed statewide goal for 2010 is to reduce projected 2010 statewide emissions from ports and goods movement to 2001 levels or below to mitigate the impacts of growth. This is an ambitious and commendable goal. However, the Port questions the applicability and appropriateness of the 2001 baseline to all sources and all Ports. While the Ports of L.A. and Long Beach have established 2001 as a baseline year, this baseline year may have adverse effects for other smaller Ports that have experienced much needed growth in recent years. The implementation of a 2001 baseline year would substantially hinder growth at the Port. The Port experienced substantial increases in vessel calls in 2003, 2004, and 2005 as a result of the transfer of the West Complex from the U.S. Navy. Implementation of a baseline that does not account for West Complex operations would be a significant burden to the Port. Furthermore, the DERP acknowledges the benefits of utilizing in-land Ports such as Stockton. Regional emissions reductions may be achieved by increased vessel calls at the Port as opposed to goods movement by truck or rail. Goods movement will continue to grow in the San Joaquin Valley, the task at hand is to find the cleanest most efficient way to move goods, currently and for the foreseeable future that mechanism is by vessel. The Port requests that the ARB consider a 2005 baseline year for the Port of Stockton or an accounting mechanism that considers all regional goods movement contributions. The Port voluntarily began a 2005 baseline emissions inventory evaluation prior to the development of the DERP. The 2005 baseline emissions inventory plan will serve as the basis for the Port's on-going emission reduction programs and projects. To date the Port of Stockton has purchased equipment to reduce emissions from Port operations as well as working cooperatively with Port tenants to reduce emissions Port wide. In an example project with Port tenant Central California Traction, a rail service provider has already installed low emissions fuel injectors that cut NOX and particle matter by about 7%. CCT does not idle the locomotives or leave them running unless switching and is working on a plan to put non-powered slugs with each unit that would reduce emissions from the locomotives by 50%.

Based on the differences in total vessel calls and total emissions, applying an equal emissions reductions goal to an under utilized Port such as Stockton and the Port of LA seems to place additional burden on the small Ports with emerging markets. The Port of Stockton had 167 vessel calls in 2005 whereas the Ports of L.A. and Long Beach had 5,263 vessel calls in 2005. The Port of Stockton is currently under-utilized and does not experience the congestion issues encountered at the Ports of L.A. and Long Beach. Using a more realistic emissions baseline such as 2005 for the Port of Stockton would not be expected to adversely affect total emission reduction goals for the State.

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### **Health Impacts**

The DERP extrapolates elevated pollutant exposures, health risks, and costs from data and reports primarily focused on Port of LA and Port of Long Beach. The size and magnitude of operations, roadway capacity, receptor locations, meteorological conditions and frequency of exposure are just a few of the factors that vary widely by Port. The stated health risks should not be considered representative of individual Ports, regional risks, or cumulative statewide conditions. Until more specific health risk calculations can be performed on an individual basis, no goals for risk reductions should be established. The potential range of variables and risks could change by orders of magnitude and without accurate modeling proposed goals for risk reduction would be arbitrary. The Port considers the presented health risks to have a high probability to overstate potential health risks and does not consider the information representative of conditions at individual Ports.

We recognize the need for protection of public health and the contribution to increased health risk from diesel particulate matter. However, substantially overstating potential health risks or presenting worst-case scenarios that do not always apply does not allow for consideration of all applicable control mechanisms or provide sufficient level of detail for informed decisions. Best available science and detailed modeling should be employed on a case-by case basis if risk reductions goals are to be established.

### **Applicability to Specific Ports**

The current plan is unclear in the applicability of individual measures to specific Ports. If the current DERP is intended as a plan or a rule making document, more detail on the applicability of individual control measures to individual Ports is needed. The DERP discusses the differences in Ports and provides very useful information on the differences in cost efficacy and applicability when evaluating various control mechanisms such as cold ironing. In addition, the DERP alludes to the differences in emissions from under utilized in-land Ports such as Stockton and the Port of LA or Long Beach and also discusses potential benefits for utilizing in-land Ports. What is not clear is how these measures and potential benefits would apply to individual ports and how compliance with adopted regulation or goals would be determined. The Port requests additional clarification on the applicability of the DERP to an individual Port.

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### **Consideration of Goods Movement Efficiency and Emissions**

The March 2006 DERP made considerable progress in addressing all emissions from goods movement and more accurately addresses the total emissions profile contributing to ambient air quality health risks and total emissions. The inclusion and quantification of emissions from goods movement via truck provides useful information in determining a more complete solution. As noted in the DERP the contributions to total emissions of both NO<sub>x</sub> and diesel PM is substantially higher for goods movement via trucks than for total Port operations.

Goods movements is a vital part of the California economy. Goods movement is demand driven and goods movement will occur and continue to grow regardless of whether Port operations and vessel calls increase. The Port would like to encourage the ARB to develop solutions and options that are based on the most efficient means to move goods to a particular region or destination. Although previously Ports were viewed by some as the highest source of emissions for goods movement, the DERP helps illustrate the contributions of trucks and the larger emissions inventories that must be managed. The Port believes that in the case of under utilized Ports, solutions that encourage goods movement by vessel will actually reduce the regional emissions inventories. In addition, recognizing the importance of projects that maximize the capacity of individual vessels and Ports can reduce emissions. Dredging projects to maintain or deepen channels will increase the capacity or total tonnage of each vessel that calls on the Port. This improved capacity means more goods can be moved without increases in the total vessels or with little or no emissions increases for the increased capacity. The Port encourages the ARB to recognize and support projects that improve overall goods movement to a region.

The Port does not believe that the environmental benefits of maritime operations at inland Ports such as Stockton have been properly evaluated or characterized. The goods movement capacity of one vessel call at the Port of Stockton is equivalent to 1,323 truck trips. NO<sub>x</sub> and CO emissions are doubled for truck transport versus marine vessel transport. Marine transport substantially lowers the total goods movement emissions inventory in the San Joaquin Valley and eliminates congestion on roadways. Each vessel call at the Port of Stockton eliminates an additional 2,185 pounds of NO<sub>x</sub> that would be emitted if the same commodities were transported to the San Joaquin Valley by truck rather than by vessel (Please see the attached presentation for additional details on the emissions comparison between Marine and truck transport).

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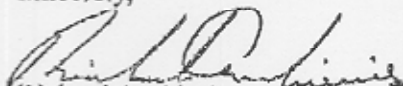
While there are areas of improvement for port operations and potential emissions reductions methods for maritime operations throughout California, marine transport to the San Joaquin Valley is still the lowest source of emissions for goods movement. The Port of Stockton would like to encourage the CARB staff to adopt an ERP that recognizes situations where marine transport has substantial air quality benefits and ensure that the proposed control strategies do not adversely affect the ability to move goods via the transportation mode with the lowest overall emissions.

#### **Flexibility for Regional and Local Consideration**

The DERP presents detailed information on a number of control mechanisms and strategies. In addition, the DERP does a commendable job of distinguishing the differences in Port operations, emissions and relative contributions to emissions inventories. Based on the wide range of available technologies and strategies and the vast differences in California ports, the Port encourages the CARB to adopt an emissions reduction plan that is flexible and allows for the consideration of the most applicable emissions reduction strategies at each Port. As illustrated by the Refrigerated Unit analysis, what may work well for one port or scenario may be cost prohibitive for another. Please allow the Port of Stockton and all goods movement partners, the flexibility to achieve the highest emission reductions in the most cost effective manner. The Port believes that by allowing flexibility and encouraging regional and local consideration, the CARB in partnership with the California Ports will achieve the best plan for California and the highest degree of compliance and emission reductions.

We look forward to assisting the CARB in developing a cleaner, healthier goods movement system for our customers and our communities. Thank you for your consideration.

Sincerely,

  
Richard Aschleris  
Port Director

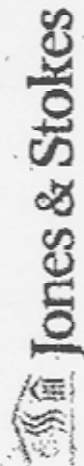


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# Environmental Benefits of Maritime Transport Activities

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**Prepared by:**



## Maritime Transport Reduces Traffic Congestion

- One Ship = 1,323 Diesel Truck Trips
- Annual Port maritime operations eliminate approximately 198,000 heavy duty diesel truck trips from the San Joaquin Valley.
- Truck trip reduction results in lower CO concentrations on congested roadways.

# Truck Trips per Ship



1 Ship

=

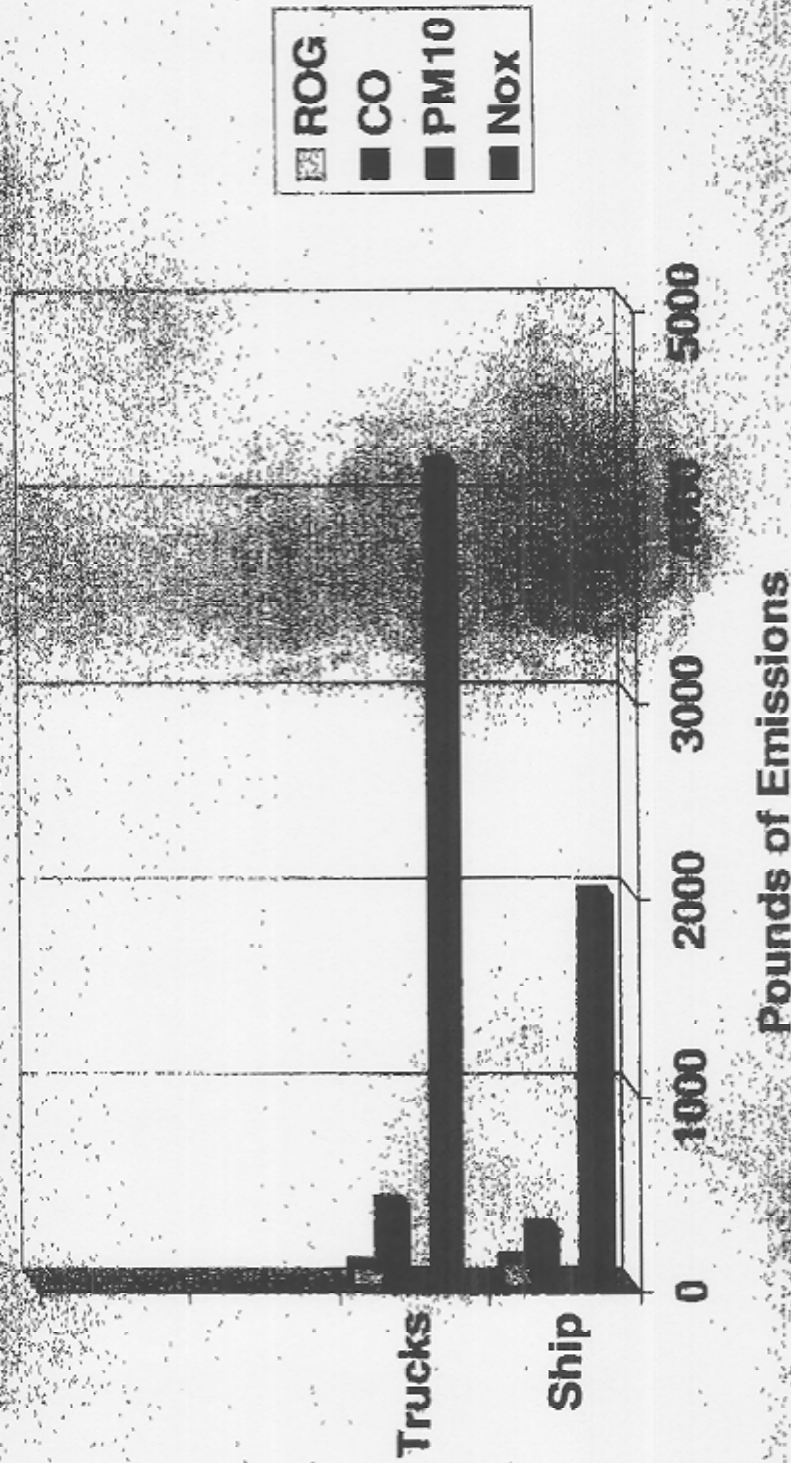
1323  
Truck Trips

(each ship carries 70 trips)

## Maritime Transport Reduces Air Emissions

- Marine transport has the lowest emissions per ton of commodity transported.
- NOx and CO emissions are doubled for truck transport vs. marine vessel transport.
- Replacing annual Port maritime transport with truck transport would add 324 tons per year of NOx pollution to San Joaquin Valley Air

## Air Pollution Comparison Equivalent Truck Trips per Ship



# Air Emissions Ship Vs. Truck Trips

|     | Single Ship Call | Equivalent Truck Trips |
|-----|------------------|------------------------|
| PM  | 50               | 45                     |
| Nox | 2000             | 4185                   |
| CO  | 283              | 412                    |
| ROG | 120              | 99                     |

## Notes:

1 Ship carries 30,000 Metric tons = 1,323 truck emissions per truck

Truck emissions based on EMFAC2002 emissions

Ship emission factors from U.S. EPA Analysis of Commercial Marine Vessels and Fuel Consumption (February 2002)



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# Total Annual Elent Truck Emiss

| Emissions (pounds) |        |          |  |
|--------------------|--------|----------|--|
| Inbound            |        |          |  |
| ROG                | CO     | NOx10    |  |
| 13,638             | 56,660 | 576,1172 |  |
| Outbound           |        |          |  |
| ROG                | CO     | NOx10    |  |
| 1,720              | 7,146  | 72,6078  |  |
| Total              |        |          |  |
| ROG                | CO     | NOx10    |  |
| 15,358             | 63,806 | 648,7250 |  |

Assumes: Annual maritime operations are replacrips from Bay

Area Ports

75 mile transport per truck trip

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